

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P510821

Luminaire Tested: **CST-CA8-480-722-U-T4**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510821
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-12)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA8-480-722-U-T4
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 2200K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 57149 lumens
Efficiency: N/A
Efficacy: 118.9 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G5

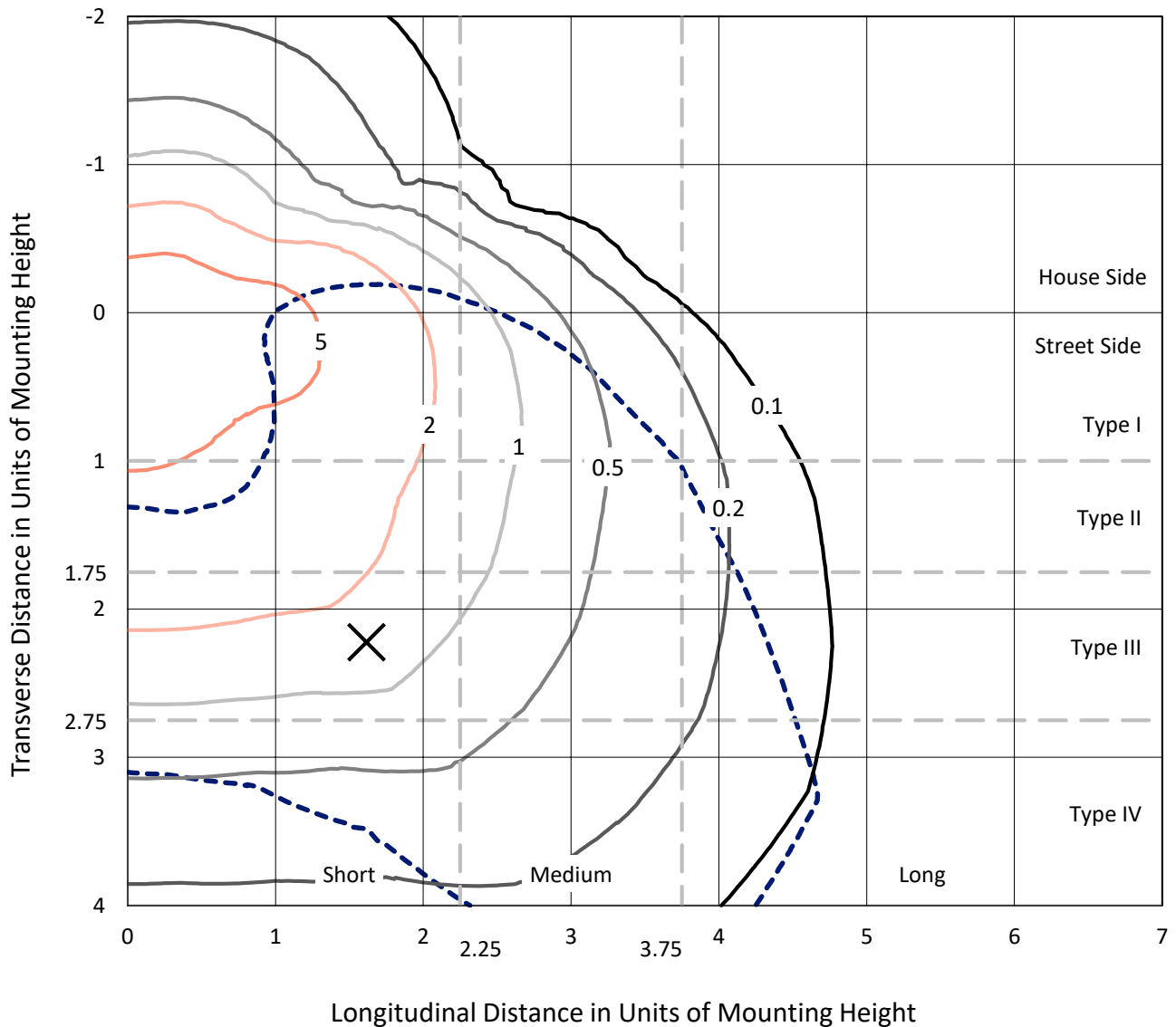
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

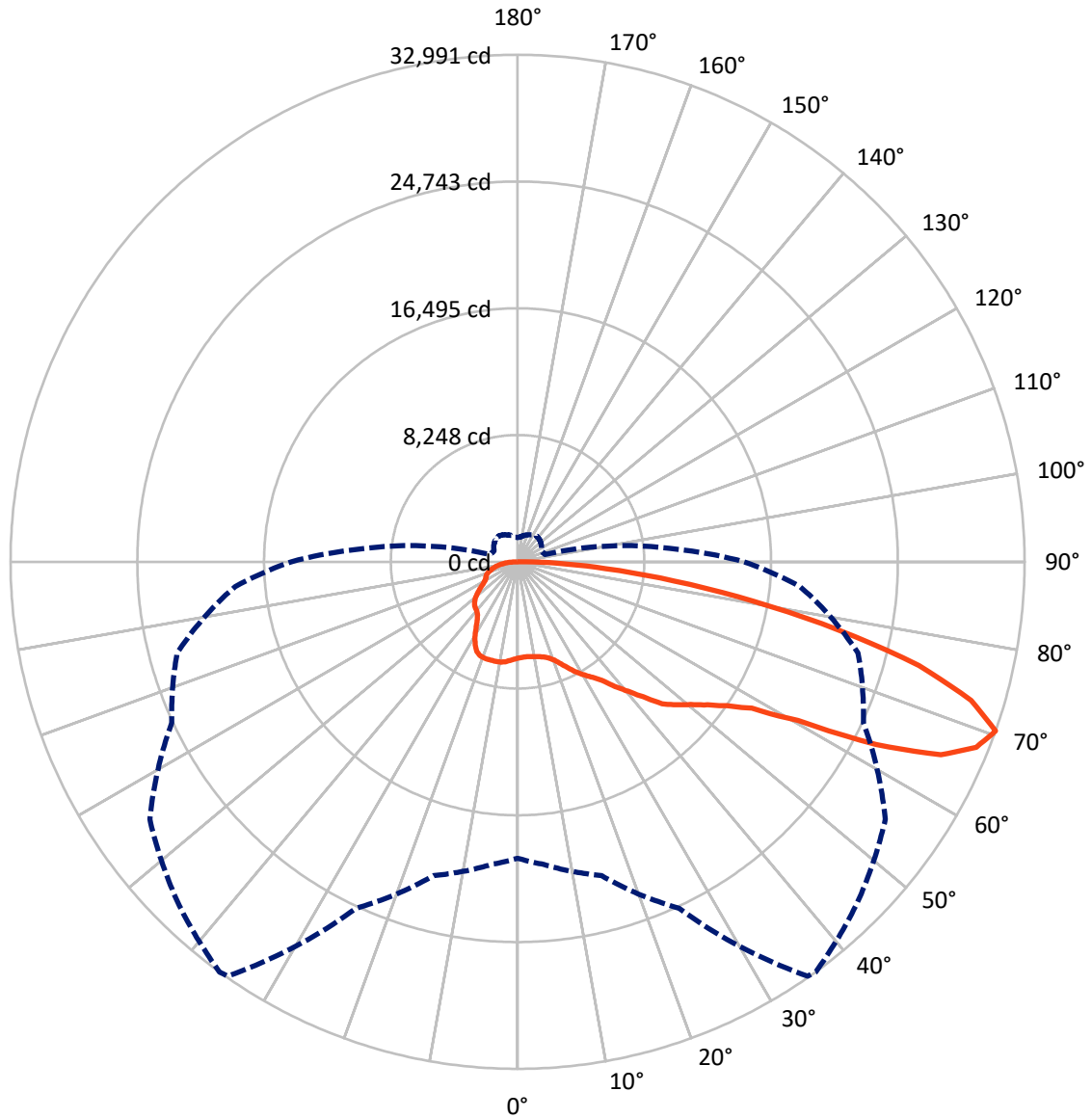
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.2 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 36-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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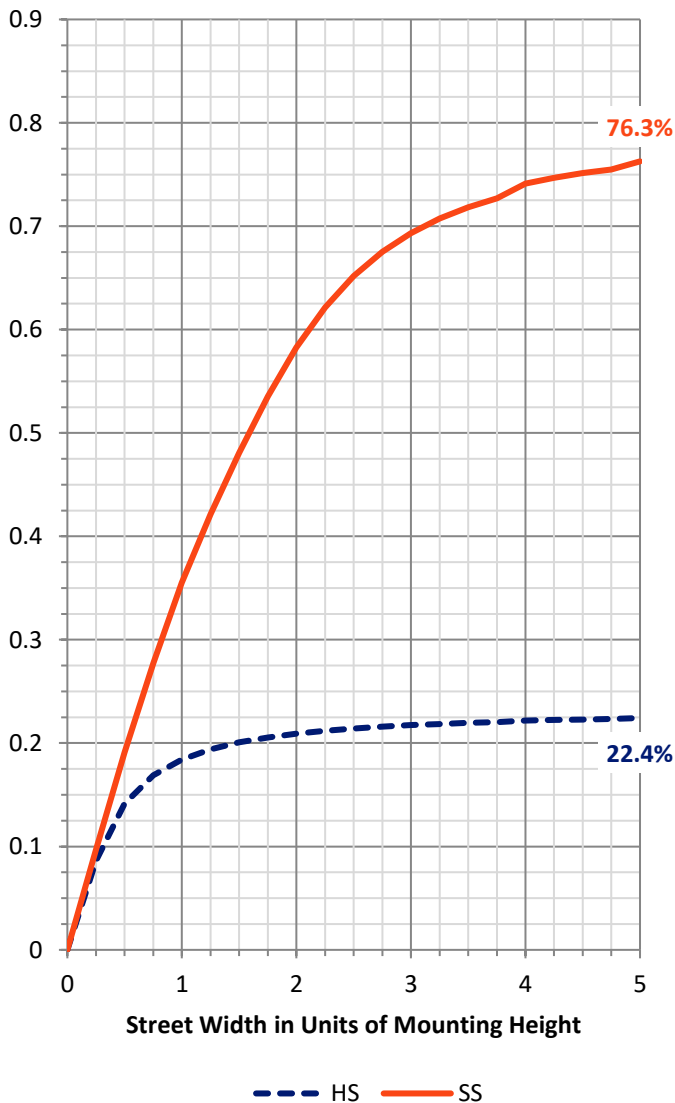
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	13021.0	0.0	13021.0
	% Fixture	22.8	0.0	22.8
Street Side	Lumens	44128.0	0.0	44128.0
	% Fixture	77.2	0.0	77.2
Total	Lumens	57149.0	0.0	57149.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	606.4	1.1
10°-20°	1874.8	3.3
20°-30°	3381.7	5.9
30°-40°	5237.7	9.2
40°-50°	7956.0	13.9
50°-60°	11027.5	19.3
60°-70°	14339.6	25.1
70°-80°	10589.6	18.5
80°-90°	2135.7	3.7
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	57149.0	100.0
0°-180°	57149.0	100.0

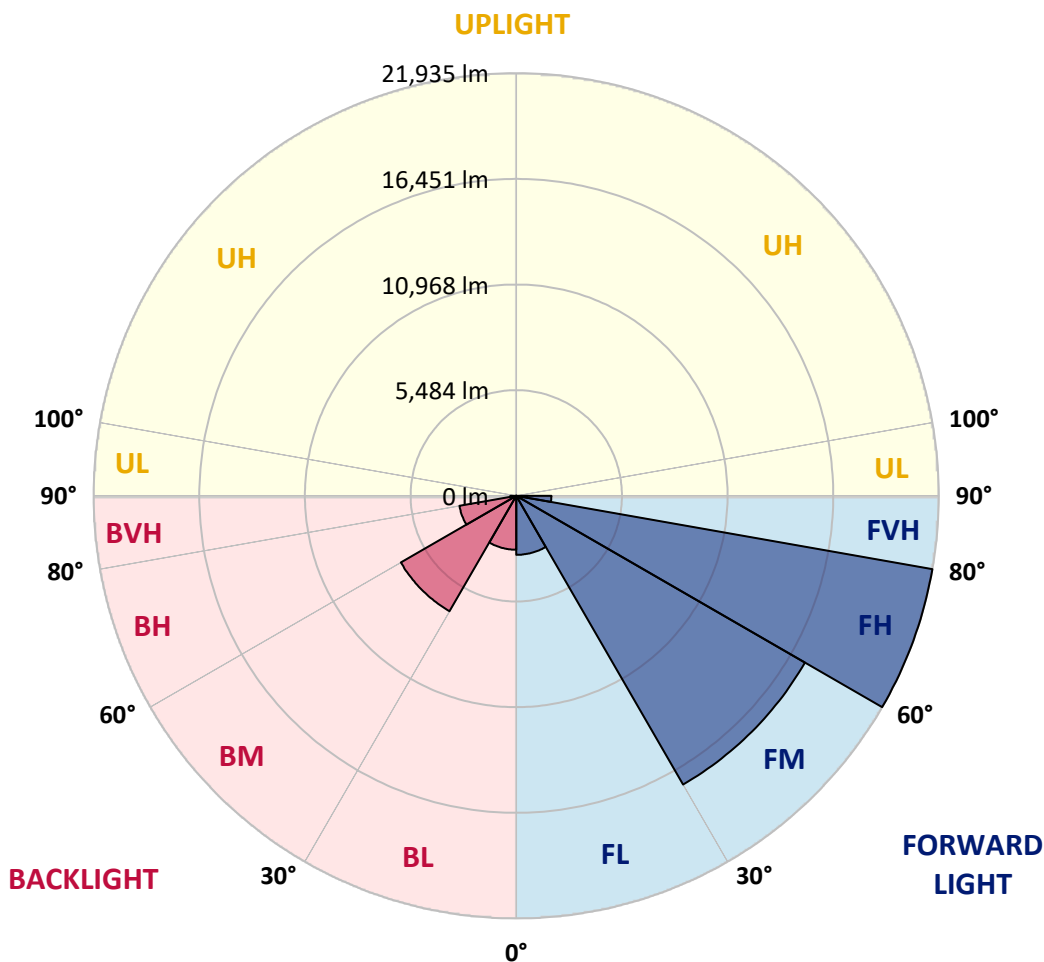


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3063.8	5.4			
FM (30°-60°)	17304.6	30.3			
FH (60°-80°)	21935.1	38.4			G5
FVH (80°-90°)	1824.6	3.2			G5
BL (0°-30°)	2799.2	4.9	B4/5000		
BM (30°-60°)	6916.6	12.1	B4/8500		
BH (60°-80°)	2994.1	5.2	B4/5000		G4/5000
BVH (80°-90°)	311.1	0.5			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5
 Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	6259.5	6259.5	6259.5	6259.5	6259.5	6259.5	6259.5	6259.5	6259.5	6259.5	6259.5
2.5°	6221.7	6213.4	6208.6	6218.1	6221.7	6222.8	6225.2	6222.8	6216.9	6238.2	6264.3
5°	6222.8	6218.1	6208.6	6200.4	6200.4	6200.4	6201.5	6228.8	6240.6	6238.2	6270.2
7.5°	6232.3	6228.8	6211.0	6205.1	6219.3	6224.0	6247.7	6239.4	6252.4	6273.7	6300.9
10°	6233.5	6228.8	6213.4	6226.4	6266.6	6273.7	6284.4	6308.0	6312.8	6338.8	6366.0
12.5°	6245.3	6245.3	6251.2	6279.6	6322.2	6330.5	6370.7	6389.7	6418.1	6431.1	6464.2
15°	6308.0	6306.9	6321.0	6353.0	6421.6	6426.4	6476.1	6532.9	6554.2	6586.1	6639.4
17.5°	6457.1	6464.2	6465.4	6489.1	6570.7	6573.1	6654.7	6708.0	6756.5	6813.3	6935.2
20°	6810.9	6797.9	6783.7	6783.7	6815.7	6832.2	6894.9	6980.1	7079.5	7180.1	7323.3
22.5°	7255.8	7281.9	7229.8	7202.6	7218.0	7199.0	7246.4	7315.0	7431.0	7581.2	7762.3
25°	7787.1	7789.5	7785.9	7675.9	7641.6	7653.4	7692.5	7756.4	7910.2	8029.7	8292.4
27.5°	8305.4	8294.8	8256.9	8140.9	8107.8	8124.4	8123.2	8299.5	8456.9	8609.5	8918.3
30°	8776.3	8804.7	8737.3	8542.1	8545.6	8543.2	8597.7	8824.9	9112.4	9396.4	9713.5
32.5°	9607.0	9520.6	9429.5	9043.8	8972.8	8964.5	8996.4	9334.8	9760.8	10240.1	10621.1
35°	10389.1	10367.8	10277.9	9886.3	9475.7	9468.6	9424.8	9836.6	10435.3	11322.7	11798.4
37.5°	11189.0	11158.3	11069.5	10735.8	10327.6	10288.6	9920.6	10371.4	11180.8	12588.9	13266.9
40°	12142.8	12123.8	11986.6	11559.4	11140.5	11081.4	10699.2	10933.5	12121.5	14275.0	14753.1
42.5°	12979.3	12975.8	12818.4	12422.0	12065.8	12006.7	11681.3	11925.0	13429.0	15926.9	16208.5
45°	13593.5	13686.9	13694.0	13468.0	13221.9	13169.8	13083.5	13419.5	14941.2	17426.1	17384.7
47.5°	14111.7	14192.2	14108.2	13992.2	13908.2	13911.8	14045.5	14712.8	16434.5	18732.4	18410.6
50°	14977.9	14928.2	14491.6	14422.9	14529.4	14592.1	14980.2	16109.1	18144.3	19958.3	19331.1
52.5°	16227.4	16036.9	15180.2	15040.6	15444.1	15467.8	16085.4	17357.4	19853.0	21010.2	20173.6
55°	17937.3	17779.9	16812.0	16167.1	16370.6	16530.3	17400.0	18636.6	21248.1	21999.4	20822.1
57.5°	20464.7	20476.6	19687.3	18485.1	17792.9	17963.3	18642.5	19880.2	22400.6	22827.7	21226.8
60°	22490.5	22865.6	22630.1	22081.1	21087.1	20971.2	20454.1	21175.9	23385.0	23531.8	21613.7
62.5°	23895.0	24065.4	24874.8	24990.7	26126.7	26175.2	23698.6	22694.0	24466.6	23993.2	21695.3
65°	23824.0	23929.3	25208.5	26765.7	30121.4	30271.7	28822.2	24990.7	25207.3	24199.1	21457.5
67.5°	22165.1	22323.6	23949.5	26860.3	32250.1	32193.3	31273.9	28188.0	25451.0	23869.0	20323.9
70°	19283.8	19772.5	21138.0	24864.1	32915.1	32990.9	31296.4	29209.1	24822.7	22935.4	18434.2
72.5°	15893.7	16047.6	17337.3	21507.2	30971.0	30859.8	30013.7	27861.4	23686.8	21246.9	15127.0
75°	12087.1	12087.1	13649.1	17139.7	26596.4	26986.9	27315.9	25234.5	20984.2	17317.2	10300.4
77.5°	8023.8	8311.3	9569.1	12879.9	21052.8	21341.5	22477.5	21509.6	17181.1	12698.9	4704.7
80°	4256.2	4291.7	5640.7	8558.6	15058.3	15602.7	17164.6	16589.5	12358.1	5949.5	1189.2
82.5°	1488.6	1624.6	2480.1	4960.3	9921.8	10261.4	11386.6	9857.9	4365.1	1317.0	657.9
85°	739.5	765.6	1092.2	2361.8	5586.2	5750.7	6652.4	3839.7	702.9	575.1	447.3
87.5°	356.2	364.4	418.9	844.9	2428.1	2540.5	2689.6	1249.5	260.3	218.9	194.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6259.5	6259.5	6259.5	6259.5	6259.5	6259.5	6259.5	6259.5	6259.5	6259.5	6259.5
2.5°	6270.2	6280.8	6300.9	6306.9	6292.7	6318.7	6343.5	6366.0	6364.8	6373.1	6402.7
5°	6284.4	6306.9	6328.1	6366.0	6402.7	6424.0	6444.1	6463.0	6469.0	6486.7	6504.5
7.5°	6328.1	6350.6	6399.1	6465.4	6467.8	6521.0	6555.3	6561.3	6566.0	6566.0	6607.4
10°	6395.6	6437.0	6515.1	6561.3	6602.7	6584.9	6620.4	6597.9	6581.4	6588.5	6616.9
12.5°	6511.6	6548.2	6660.6	6711.5	6673.7	6666.6	6631.1	6580.2	6522.2	6516.3	6542.3
15°	6693.8	6762.4	6863.0	6911.5	6816.8	6732.8	6613.3	6509.2	6396.8	6355.4	6371.9
17.5°	6987.2	7070.1	7180.1	7147.0	6974.2	6808.6	6611.0	6390.9	6173.1	6021.7	6060.7
20°	7416.8	7478.3	7568.2	7434.5	7182.5	6909.1	6584.9	6237.0	5869.0	5593.3	5561.4
22.5°	7867.6	7961.1	7906.6	7659.3	7329.2	6948.2	6530.5	6013.4	5444.2	5098.7	5046.7
25°	8410.7	8441.5	8253.3	7880.6	7370.6	6886.7	6354.2	5686.8	5010.0	4684.6	4669.2
27.5°	8987.0	8917.2	8566.9	7982.4	7324.5	6704.4	6000.4	5170.9	4617.1	4329.6	4284.6
30°	9637.8	9475.7	8826.0	7993.0	7150.5	6349.4	5553.1	4767.4	4297.7	4008.9	3962.8
32.5°	10475.5	10093.3	9066.2	7883.0	6783.7	5828.8	5015.9	4423.1	4010.1	3720.2	3678.8
35°	11546.4	10901.5	9320.6	7684.2	6331.7	5308.2	4571.0	4130.8	3777.0	3427.9	3372.3
37.5°	12780.5	12029.2	9624.8	7433.3	5835.9	4850.2	4270.4	3945.0	3604.3	3209.0	3142.8
40°	14214.7	13158.0	10093.3	7134.0	5391.0	4520.1	4124.9	3881.1	3508.4	3096.6	3020.9
42.5°	15457.1	14351.9	10650.6	6812.1	4970.9	4245.6	4059.8	3838.5	3448.1	3012.6	2926.2
45°	16606.1	15337.6	11195.0	6421.6	4528.4	4057.4	3981.7	3732.0	3341.6	2908.5	2818.6
47.5°	17539.7	16133.9	11668.3	6063.1	4174.6	3884.7	3811.3	3529.7	3162.9	2783.1	2716.8
50°	18256.7	16732.7	11927.4	5777.9	3800.7	3688.3	3591.2	3301.3	2948.7	2621.0	2564.2
52.5°	18990.4	17332.6	12055.2	5792.1	3452.8	3396.0	3296.6	3048.1	2778.3	2526.3	2464.8
55°	19417.5	17578.7	11920.3	5447.8	3133.3	3067.0	2980.7	2851.7	2690.8	2467.1	2409.1
57.5°	19667.2	17731.4	11509.7	4443.2	2748.7	2686.0	2700.2	2689.6	2557.1	2321.6	2268.3
60°	19847.1	17400.0	10668.4	3265.8	2421.0	2373.6	2490.8	2452.9	2338.1	2154.7	2109.8
62.5°	19701.5	16769.4	9153.8	2455.3	2153.6	2254.1	2357.1	2287.3	2131.1	1964.2	1912.2
65°	18814.1	15531.7	6957.7	1972.5	2067.2	2205.6	2288.5	2176.0	2017.5	1819.9	1796.2
67.5°	17198.9	13288.2	4103.6	1808.0	2002.1	2148.8	2217.5	2068.4	1928.7	1739.4	1711.0
70°	14734.1	9947.8	1832.9	1683.8	1888.5	2034.0	2079.0	1938.2	1786.7	1609.3	1580.9
72.5°	10966.6	5998.0	1235.3	1554.8	1720.5	1849.5	1899.2	1750.1	1642.4	1561.9	1553.6
75°	6090.3	2082.6	1139.5	1408.1	1537.1	1653.0	1714.6	1609.3	1524.1	1414.0	1369.0
77.5°	1939.4	885.1	1082.7	1259.0	1422.3	1518.1	1508.7	1350.1	1322.9	1189.2	1177.4
80°	773.9	771.5	1001.0	1030.6	1214.0	1294.5	1273.2	1073.2	1108.7	1030.6	999.9
82.5°	607.0	706.4	802.3	786.9	944.3	1038.9	1009.3	788.1	891.0	818.8	749.0
85°	461.5	618.9	514.7	512.4	659.1	771.5	790.4	605.8	607.0	552.6	492.2
87.5°	237.8	228.4	197.6	196.4	220.1	313.6	384.6	344.3	272.2	204.7	196.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)